



Florida Department of Environmental Protection

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PERMITTEE

Florida Power and Light (FPL) Company
700 Universe Boulevard
Juno Beach, Florida 33408

Authorized Representative:
Mr. Randall R. LaBauve, Vice President

Air Permit No. 0990646-003-AC
PSD-FL-354A
FPL West County Energy Center
Facility ID No. 0990646
Increased Hours for Auxiliary Boiler
Air Permit Modification
Palm Beach County, Florida

PROJECT

This is the final permit to modify Permit No. 0990646-001-AC (PSD-FL-354) for an increase in the hours of operation of the auxiliary boiler to 1500 hours per year. The auxiliary boiler is located at the existing FPL West County Energy Center, which is a power plant categorized under Standard Industrial Classification No. 4911. The existing facility is located in Palm Beach County at 20505 State Road 80 in Loxahatchee, Florida. The UTM coordinates are Zone 17, 562.19 km East and 2953.04 km North.

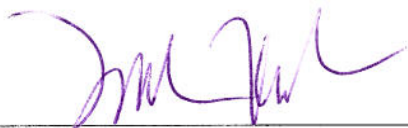
This final permit modification is organized into the following sections: Section 1 (General Information) and Section 2 (Air Permit Modification).

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. as well as those for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida



Joseph Kahn, Director
Division of Air Resource Management



12/2/09
(Date)

FINAL PERMIT MODIFICATION

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail or a link to these documents made available electronically on a publicly accessible server with received receipt requested, or by certified mail* with return receipt requested, before the close of business on 12/3/09 to the persons listed below.

Electronic Mail

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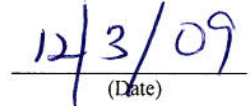
FINAL PERMIT MODIFICATION

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)



(Date)

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

Permit No. 0990646-001-AC authorized construction of two nominal 1250 megawatt combined cycle units and other associated support equipment. Permit No. 0990646-002-AC authorized the construction of a third nominal 1250 megawatt combined cycle unit.

PROPOSED PROJECT

Permit No. 0990646-001-AC (PSD-FL-354) also authorized the construction of two auxiliary boilers, each rated at a maximum heat input rate of 99.8 million British thermal units (MMBtu) per hour and limited to 500 hours per year of operation. The purpose of the small gas-fired auxiliary boiler is to provide steam for blade cooling for combustion turbine startups. During construction, the applicant determined that only one auxiliary boiler at 1000 hours per year would be necessary. However, it was later determined that an additional 500 hours of operation will be necessary to accommodate the proposed new combined cycle Unit 3. This permitting action modifies the original permit to identify the single auxiliary boiler authorized for 1500 hours of operation per year.

This project will modify the following emissions unit.

Facility ID No. 0990646	
ID No.	Emission Unit Description
009	Auxiliary Boiler

FACILITY REGULATORY CLASSIFICATION

- The facility will be a major source of hazardous air pollutants (HAP).
- The facility will operate units subject to the acid rain provisions of the Clean Air Act.
- The facility will be a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

SECTION 2. AIR PERMIT MODIFICATION

Auxiliary Boiler

Permit Modified: 0990646-001-AC (PSD-FL-354)

Subsection III.D. Auxiliary Boiler and Process Heaters (EU-009 and EU-010)

As shown below, this permitting action modifies Subsection III.D of Permit No. 0990646-001-AC. Additions are denoted with double-underline and deletions are denoted with ~~strikethrough~~.

This section of the permit addresses the following emissions units.

ID	Emission Unit Description
014	Two <u>One</u> limited use gas-fueled auxiliary boilers (99.8 MMBTU/hr and 85,000 lb/hr)
015	Two gas-fueled 10 MMBtu/hr process heaters

NESHAP APPLICABILITY

1. NESHAP Subpart DDDDD Applicability: These emissions units are subject to Subpart DDDDD, which applies to an industrial, commercial, or institutional boiler or process heater as defined in Sec. 63.7575 that is located at, or is part of, a major source of HAP as defined in Sec. 40 CFR 63.2.

The listed emission units shall comply with 40 CFR 63, NESHAP Subpart DDDDD only to the extent that the regulations apply to the emission unit and its operations (e.g. limited use gas-fueled or small gas-fueled categories).

[40 CFR 63, Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, or Institutional Boiler or Process Heater]

NSPS APPLICABILITY

2. NSPS Subpart Dc Applicability: ~~Each~~ The 99.8 MMBTU/hr (85,000 lb/hr) auxiliary boiler is subject to all applicable requirements of 40 CFR 60, Subpart Dc which applies to Small Industrial, Commercial, or Institutional Boilers. Specifically, ~~each~~ the emission unit shall comply with 40 CFR 60.48c Reporting and Recordkeeping Requirements.

[Rule 62-204.800(7)(b) and 40 CFR 60, NSPS-Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, attached as Appendix Dc].

EMISSIONS AND TESTING REQUIREMENTS

3. Auxiliary Boiler BACT Emissions Limits:

NO _x	CO	VOC, SO ₂ , PM/PM ₁₀
0.05 lb/MMBtu	0.08 lb/MMBtu	2 gr S/100SCF natural gas spec and 10% Opacity

4. Auxiliary Boilers Testing Requirements: ~~Each~~ The unit shall be stack tested to demonstrate initial compliance with the emission standards for CO, NO_x and visible emissions. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of each combined cycle unit.

[Rule 62-297.310(7)(a)1, F.A.C. and 40 CFR 63.7]

Test Methods: Any required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources

SECTION 2. AIR PERMIT MODIFICATION

Auxiliary Boiler

Method	Description of Method and Comments
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Notes: The method shall be based on a continuous sampling train.}

5. Annual CO Performance Test for Auxiliary Boilers: Pursuant to 40 CFR 63.7515(e) permittee shall conduct an annual CO test according to Sec. 63.7520. Each annual performance test must be conducted between 10 and 12 months after the previous performance test.

[40 CFR 63.7515 and Rule 62-204.800(11)(b)84. F.A.C.]

6. Natural Gas Fired Process Heaters BACT Emissions Limits:

NO _x	CO	VOC, SO ₂ and PM/PM ₁₀
0.095 lb/MMBtu	0.08 lb/MMBtu	2 gr S/100 SCF natural gas spec and 10% Opacity

7. Natural Gas Fired Process Heaters Testing Requirements: Each unit shall be stack tested to demonstrate initial compliance with the emission standards for CO, NO_x and visible emissions. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of each combined cycle unit. As an alternative, a Manufacturer certification of emissions characteristics of the purchased model that are at least as stringent as the BACT values can be used to fulfill this requirement.

[Rule 62-297.310(7)(a)1, F.A.C. and 40 CFR 60.8]

Test Methods: Any required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Notes: The method shall be based on a continuous sampling train.}

EQUIPMENT SPECIFICATIONS

8. Equipment: The permittee is authorized to install, operate, and maintain ~~two~~ one auxiliary boilers with a maximum design heat input of 99.8 MMBtu/hr (85,000 lb/hr) ~~each~~ to produce steam during start up of the CTs and two 10 MMBtu/hr process heaters for the purpose of heating the natural gas supply to the CTs.
[Applicant Request; Rule 62-210.200(PTE), F.A.C.]

PERFORMANCE REQUIREMENTS

9. Hours of Operation: The hours of operation of ~~each the~~ limited use gas-fueled auxiliary boiler shall not exceed ~~500~~ 1500 hours per year. The gas-fueled process heaters are allowed to operate continuously (8760 hours per year). [Applicant Request; Rule 62-210.200(PTE), F.A.C. and 40 CFR 63.7575]

NOTIFICATION, REPORTING AND RECORDS

10. Notification: Initial notification is required for the ~~two~~ limited use 99.8 MMBtu/hr gas-fueled auxiliary boilers. Initial notification is not required for the two small gas-fueled 10 MMBtu/hr process heaters.
[40 CFR 63.9, 40 CFR 63.7506(c) and Rule 62-204.800(11)(b) F.A.C.]
11. Reporting: The permittee shall maintain records of the amount of natural gas used in the heaters and auxiliary boilers. These records shall be submitted to the Compliance Authority on an annual basis or upon request.
[Rule 62-4.070(3) F.A.C.]